# SURVEILLANCE SYSTEMS LIFE CYCLE SUPPORT LABOR CATEGORY DESCRIPTIONS

# 1. SENIOR PROGRAM MANAGER

#### Minimum/General Experience:

This position requires a minimum of fifteen years of general experience, of which at least ten years must be specialized. Specialized experience includes: project development from inception to deployment, expertise in the management and control of funds and resources using complex reporting mechanisms, and demonstrated capability in managing multi-task contracts and/or subcontracts of various types and complexity. General experience includes increasing responsibilities in surveillance systems design and/or management.

## Functional Responsibility:

Serves as the contractor's single contract manager, and shall be the contractor's authorized interface with the Government Contracting Officer (CO), the contract-level Contracting Officer's Representative (COR), Government management personnel, and customer agency representatives. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel, and communicating policies, purposes, and goals of the organization to subordinates.

## Minimum Education:

A Bachelor's degree in Engineering, Computer Science, or other related discipline is required. With a Master's degree in a related field, a minimum of thirteen years of general experience is required, of which at least nine years must be specialized experience. With a Ph.D. in a related field, a minimum of twelve years of general experience is required, of which at least eight years must be specialized experience.

#### 2. PROGRAM MANAGER

#### Minimum/General Experience:

This position requires a minimum of twelve years of general experience, of which at least six years must be specialized. Specialized experience includes: complete engineering project development from inception to deployment, demonstrated ability to provide guidance and direction in the tasks similar to the sample tasks provided in the Statement of Work, proven expertise in the management and control of funds and resources, and demonstrated capability in managing multi-task contracts of this type and complexity. General experience includes increasing responsibilities in surveillance system design and management.

## Functional Responsibility:

Serves as the contractor's contract manager, and shall be the contractor's authorized interface with the Government CO, the COR, Government management personnel, and customer agency representatives. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates. Shall be responsible for the overall contract performance.

# Minimum Education:

A Bachelor's degree in Engineering, Computer Science, or other related scientific or technical discipline is required. With a Master's degree in a related field, a minimum of ten years of general experience is required, of which at least five years must be specialized experience. With a Ph.D. in a

related field, a minimum of eight years of general experience is required, of which at least four years must be specialized experience.

#### 3. PROJECT MANAGER

## Minimum/General Experience:

This position requires a minimum of seven years of general experience, of which at least four years must be specialized. Specialized experience includes: project development from inception to deployment, expertise in the management and control of funds and resources using complex reporting mechanisms, and demonstrated capability in managing multi-task contracts and/or subcontracts of various types and complexity. General experience includes increasing responsibilities in surveillance systems design and/or management.

#### Functional Responsibility:

Serves as the project manager for a large, complex task order (or a group of task orders affecting the same common/standard/migration system) and shall assist the Program Manager in working with the Government CO, the COR, Government management personnel and customer agency representatives. Under the guidance of the Program Manager, is responsible for the overall management of the specific task order(s) and insures that the technical solutions and schedules in the task order are implemented in a timely manner. Performs enterprise wide horizontal integration planning and interfaces to other functional systems.

#### Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required. With a Master's degree in a related field, a minimum of five years of general experience is required, of which at least three years must be specialized experience. With a Ph.D. in a related field, a minimum of three years of general experience is required, of which at least one year must be specialized experience. With eight years of general experience, of which at least five years must be specialized experience, a degree is not required.

## 4. JUNIOR ANALYST

# Minimum/General Experience:

This position requires a minimum of four years of experience, of which at least two years must be specialized. Specialized experience includes: working with engineering systems using incremental development, joint application development, rapid prototyping, and CASE technology concepts and techniques. Typically required to work under close supervision and direction.

## Functional Responsibility:

Applies process improvement and re-engineering methodologies and principles to conduct process modernization projects. Develops functional area process and data models for use in designing and building integrated, shared software and database management systems.

## Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business or other related scientific or technical discipline is required. A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized experience and two years general experience.

## 5. FUNCTIONAL ANALYST

#### Minimum/General Experience:

This position requires a minimum of five years of experience, of which at least three years must be specialized. Specialized experience includes: developing functional requirements for complex integrated ADP systems. Must demonstrate the ability to work independently or under only general direction.

## Functional Responsibility:

Analyzes user needs to determine functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task.

## Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized and two years general experience. With eight years of general experience, of which at least five years must be specialized experience, a degree is not required.

## 6. SENIOR FUNCTIONAL ANALYST

#### Minimum/General Experience:

This position requires a minimum of seven years of experience, of which at least six years must be specialized. Specialized experience includes: developing functional requirements for complex integrated ADP systems. Must demonstrate the ability to work independently or under only general direction.

# Functional Responsibility:

Analyzes user needs to determine functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task. Provides daily supervision and direction to support staff.

#### Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. A Master of Sciences degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to one year specialized and two years general experience. With ten years of general experience, of which at least eight years must be specialized experience, a degree is not required.

# 7. COMPUTER SYSTEMS ANALYST

# Minimum/General Experience:

This position requires a minimum of three years experience, of which at least two years must be specialized. Specialized experience includes: analysis and design of business applications on complex systems for large-scale computers, including three years experience in data base management concepts, use of the programming languages such as Ada, C++, COBOL, 4GL, and/or DBMS. Knowledge of current storage and retrieval methods, one year of systems analysis experience designing technical applications on computer systems and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of

computer programs. General experience includes increasing responsibilities in information system design and management. Must demonstrate the ability to work independently or under only general direction on requirements that are moderately complex to analyze, plan, program, and implement.

#### Functional Responsibility:

Analyzes and develops computer software processing a wide range of capabilities, including numerous engineering, business, and records management functions. Develops plans for automated information systems from project inception to conclusion. Analyzes user interfaces, maintains hardware and software performance tuning, analyzes workload and computer modifications, maintains interfaces with outside systems, analyzes downtimes, analyzes proposed system modifications, upgrades and new COTS. Analyzes the problem and information to be processed. Defines the problem, and develops system requirements and program specifications, from which programmers prepare detailed flow charts, programs, and tests. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions.

## Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required. With a Master's degree in a related field, a minimum of two years of general experience is required, of which at least one year must be specialized experience. With four years of general experience, of which at least three years must be specialized experience, a degree is not required.

## 8. SENIOR COMPUTER SYSTEMS ANALYST

## Minimum/General Experience:

This position requires a minimum of five years experience, of which at least three years must be specialized. Specialized experience includes: analysis and design of business applications on complex systems for large-scale computers, data base management, use of programming languages such as Ada, C++, COBOL, 4GL, and/or DBMS. Knowledge of current storage and retrieval methods and demonstrated ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer programs. General experience includes increasing responsibilities in assignments of a technical nature. Proven ability to work independently or under only general direction on complex application problems involving all phases of system analysis is required.

## Functional Responsibility:

Provides technical and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concepts and to user standards, and for progress in accordance with schedules. Coordinates with the Project and/or Program Manager to ensure problem solution and user satisfaction. Makes recommendations, if needed, for approval of major systems installations. Prepares milestone status reports and deliveries/presentations on the system concept to colleagues, subordinates, and end user representatives. Provides daily supervision and direction to support staff.

# Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required. With a Master's degree in a related field, a minimum of four years of general experience is required, of which at least three years must be specialized experience. With a Ph.D. in a related field, a minimum of three years of general experience is required. With eight years of general experience, of which at least five years must be specialized experience, a degree is not required.

## 9. SENIOR SYSTEMS ARCHITECT

#### Minimum/General Experience:

This position requires a minimum of seven years experience, of which at least five years must be specialized. Specialized experience includes: supervision of system architects, use of structured analysis, design methodologies and design tools, and other design technologies, object oriented principles, and experience with the logical and physical functional, operational, and technical architecture of large and complex surveillance systems.

## Functional Responsibility:

Analyses system information requirements to develop technical specifications in the development of or large-scale surveillance systems. Designs architecture to include the software, hardware, and communications to support the total requirements as well as provide for present and future crossfunctional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards – such as the Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environment (OSE) reference model – as they apply to the implementation and specification of Information Management (IM) solution of the application platform, across the application program interface (API), and the external environment/software application. Ensures that the common operating environment is TAFIM compliant. Evaluates analytically and systematically any problems with workflow, organization, and planning and develops appropriate corrective action. Provides daily supervision and direction to staff.

#### Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required. With a Master's degree in a related field, a minimum of five years of general experience is required, of which at least three years must be specialized experience. With a Ph.D. in a related field, a minimum of three years of general experience is required, of which at least one year must be specialized experience. With nine years of general experience, of which at least seven years must be specialized experience, a degree is not required.

## 10. APPLICATIONS ENGINEER

## Minimum/General Experience:

This position requires a minimum of three years experience, of which at least two years must be specialized. Specialized experience includes: experience as an applications programmer on large-scale data base management systems, knowledge of computer equipment and ability to develop complex software to satisfy design objectives. Demonstrated ability to work independently or under only general direction.

# Functional Responsibility:

Analyzes functional business applications and design specifications for functional activities. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers to ensure program deadlines are met.

# Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required. With a Master's degree in a related field, a minimum of two years of general experience is required, of which at least one year must be specialized experience. With five

years of general experience, of which at least three years must be specialized experience, a degree is not required.

#### 11. SOFTWARE ENGINEER

#### Minimum/General Experience:

This position requires a minimum of three years of software development experience. Requires knowledge of one or more platforms and operating systems, as well as software design, integration, and testing.

## Functional Responsibility:

Analyzes software requirements to determine feasibility of design within time and cost constraints. Consults with hardware engineers and other engineering staff to evaluate interface between hardware and software, and operational and performance requirements of overall system. Formulates and designs software system, using scientific analysis and mathematical models to predict and measure outcome and consequences of design. Develops and directs software system testing procedures, programming, and documentation. Consults with customer concerning maintenance of software system.

## Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business or other related technical discipline is required. With a Master's degree in a related field, a minimum of one year of software development experience is required.

## 12. LOGISTICS ENGINEER

## Minimum/General Experience:

This position requires a minimum of three years of logistical engineering experience. Requires knowledge of all elements of logistics support requirements. Requires demonstrated experience in the analysis of system life cycle support requirements, life cycle support funding requirements, and reviews.

## Functional Responsibilities:

Analyzes life cycle support requirements to determine training requirements, spare parts requirements, test equipment requirements, supply support requirements, and all other integrated logistic support elements. Evaluates funding requirements and conducts logistic support analyses to document maintenance requirements based on system reliability, availability, and maintainability results.

## Minimum Education:

A Bachelor's degree in Industrial Engineering, Business Administration, Public Administration, or other related technical field is required. A degree or diploma in some other business or technical discipline will be considered acceptable if the applicant has four years of general experience. With six years of logistical engineering experience, a degree is not required.

## 13. SENIOR LOGISTICS ENGINEER

#### Minimum/General Experience:

This position requires a minimum of eight years of experience, of which at least six years must be specialized in the area of integrated logistics support. Demonstrated experience in integrated logistics management and system life cycle support requirements/issues as they apply to all elements of logistic engineering and life cycle support elements. Demonstrated ability to work

independently or under only general direction on integrated logistics requirements that are complex to analyze, plan, and implement.

## Functional Responsibility:

Directs and coordinates all activities involved with the management of system life cycle support efforts, such as budgeting, manpower, and resource planning. Analyzes life cycle support requirements to determine training requirements, spare parts requirements, test equipment requirements, supply support requirements, and all other integrated logistic support elements. Evaluates funding requirements and conducts logistic support analyses to document maintenance requirements based on system reliability, availability, and maintainability results.

## Minimum Education:

A Bachelor's degree in Industrial Engineering, Business Administration, Public Administration, or other related technical field is required. With a Master's degree in a related discipline, a minimum of six years of general experience is required, of which at least two years must be specialized experience in the area of integrated logistics management and support. With ten years of general experience, of which at least four years must be specialized experience, a degree is not required.

## 14. NETWORK ENGINEER

## Minimum/General Experience:

This position requires a minimum of six years of experience managing or performing network engineering and design activities, of which at least three years must be specialized experience in a specific technical environment involving the development and/or analysis of computer networks. Requires hands-on skills and working knowledge of the various protocols, interoperability between wide area networking, and bridge/routing/network switch alternatives.

## Functional Responsibility:

Analyses network characteristics such as traffic, connect time, transmission speed, packet size, and throughput. Has the ability to procure, remove, and modify network components. Provides support on all phases of analysis, design, testing, and implementation of networks. Performs the physical installation and maintenance of the hardware necessary to provide for optimal performance of the local area networks.

# Minimum Education:

A Bachelor of Science degree in Computer Science, Information Systems, Engineering, or other related scientific or technical discipline is required. With a Master's degree in a related field, a minimum of four years of experience is required, of which at least two years must be specialized experience.

## 15. SENIOR NETWORK ENGINEER

# Minimum/General Experience:

This position requires a minimum of ten years experience managing or performing network engineering and design activities, of which at least three years must be specialized in a specific technical environment.

#### Functional Responsibility:

Analyzes studies, and designs complex data networks. Analyzes network characteristics (e.g., traffic, connect time, transmission speeds, packet sizes, and throughput) and recommends procurement, removals, and modifications to network components. Designs and optimizes network topologies and site configurations. Plans installations, transitions, and cutover of network components and capabilities. Coordinates requirements with users and suppliers. Manages network software development and support requirements using formal specifications, data flow diagrams, and

other accepted designs techniques. Estimates network hardware and software development and implementation costs and schedules. Reviews existing network designs and capabilities, and assists in making refinements, reducing operating overhead, enhancing network throughput, and improving of current network topologies.

#### Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related technical discipline is required. With a Master's degree in a related field, a minimum of six years of general experience is required, of which at least one year must be specialized experience in a technical environment.

## 16. SYSTEMS ENGINEER

#### Minimum/General Experience:

The position requires a minimum of three years of experience or equivalent in technical leadership and guidance, problem definition, surveillance, computer and communication system design and implementation. General experience includes exhibiting a broad technical understanding, performing complex technical work, and carrying a high level of responsibility in conceptualization, planning, and coordination with other projects. Performs at a professional level with minimum guidance and direction. Exhibits initiative and judgment and has latitude in carrying out assignments. Required to have a broad technical background suitable to allow a significant contribution in a number of technical areas or to be a recognized technical expert in a specialty.

# Functional Responsibility:

Applies software, hardware, and standards information technology skills in the analysis, specification, development, integration, and acquisition of systems for surveillance and information management applications. Ensures these systems and applications are compliant with standards for open systems architectures, reference models, and profiles of standards – such as IEEE Open Systems Environment reference model – as they apply to the implementation and specification of information management solutions on the application platform, across the application program interface, and the external environment/software applications. Evaluates and recommends COTS applications and methodologies that can be acquired to provide interoperable, portable, and scaleable information technology solutions. Performs analysis and validation of reusable software/hardware components to ensure the integration of these components into interoperable information management designs.

#### Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, or other related technical discipline is required. With a Master's degree in a related field, a minimum of two years of experience is required. With five years of general experience, of which at least three years must be specialized experience in systems engineering, a degree is not required.

## 17. SENIOR SYSTEMS ENGINEER

#### Minimum/General Experience:

This position requires a minimum of six years of experience in technical leadership and guidance, problem definition, surveillance, computer and communication system design and implementation. General experience includes exhibiting a broad technical understanding, performing complex technical work, and carrying a high level of responsibility in conceptualization, planning, and

coordination with other projects. Performs at a professional level with minimum guidance and direction. Exhibits initiative and judgement and has latitude in carrying out assignments. Required to have a broad technical background suitable to allow a significant contribution in a number of technical areas or to be a recognized technical expert in a specialty.

## Functional Responsibilities:

Demonstrates responsibility for the development of hardware, software, communications, integration, and acceptance testing of modules, subsystems, and total systems. Also demonstrates responsibility for system enhancement, including incremental design/functional element configuration, interfaces, coordination and prototyping. In addition to performing a variety of complex technical tasks, Senior Systems Engineers may provide technical direction to other technical employees.

## Minimum Education:

A Bachelor of Science degree in Engineering, Computer Science, Information Systems, or some related scientific or technical discipline is required. With a Master's degree in a related field, a minimum of four years of experience is required. With a Ph.D. in a related field, a minimum of three years of experience is required. With eight years of general experience, of which at least six must be specialized experience in systems engineering, a degree is not required

# 18. CAD DESIGN SPECIALIST (DRAFTSMAN)

#### Minimum/General Experience:

This position requires a minimum of three years of experience with specialized mini-computers in the use of specialized engineering, architectural, and land or products development programs.

## Functional Responsibility:

Drafts designs of electromechanical equipment such as aircraft engine subassemblies, electronic optical-character-recognition and related data processing systems, gyroscopes, rocket engine control systems, automatic materials handling and processing machinery, or bio-medical equipment.

## Minimum Education:

An Associate's degree in computer-aided drafting or a related discipline is required. With a Bachelor's degree in a related technical field, a minimum of two years of experience is required.

## 19. COMMUNICATIONS SOFTWARE SPECIALIST

## Minimum/General Experience:

This position requires a minimum of four years experience, of which at least three years must be specialized. Specialized experience includes: developing, testing, installing, and operating network and computer (host) communications software (e.g., access method and protocol software, application interfaces, transaction processors, and emulators); using and implementing communications standards. General experience includes all aspects of network and computer communications software. Must demonstrate the ability to work independently or under only general direction.

# **Functional Responsibility:**

Analyzes network and computer communications software characteristics and recommends software procurement, removals, and modifications. Adds, deletes, and modifies, as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications software.

## Minimum Education:

An Associates of Arts degree in a related field is required. A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline will be considered equivalent to three years general experience. A Master's degree in a related field will be considered equivalent to one year specialized experience and two years general experience. With five years of general experience, of which at least four years must be specialized experience, a degree is not required.

## 20. DATA BASE MANAGEMENT SPECIALIST

## Minimum/General Experience:

This position requires a minimum of six years experience, of which at least four years must be specialized. Specialized experience includes: demonstrated experience using current DBMS technologies, application design utilizing various DBMS and experience with DBMS internals. General experience includes increasing responsibilities in DBMS systems analysis and programming. Demonstrated ability to work independently or under only general direction.

# Functional Responsibility:

Provides highly technical expertise in the use of DBMS. Evaluates and recommends available DBMS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications.

#### Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required. With a Master's degree in a related field, a minimum of four years of general experience is required, of which at least three years must be specialized experience. With seven years of general experience, of which at least five years must be specialized experience, a degree is not required.

## 21. SENIOR DATA BASE MANAGEMENT SPECIALIST

# Minimum/General Experience:

This position requires a minimum of eight years experience, of which at least six years must be specialized. Specialized experience includes: demonstrated experience with DBMS design and system analysis, current operating systems software internals and data manipulation languages. General experience includes increasing responsibilities in the development and maintenance of data base systems.

## Functional Responsibility:

Manages the development of data base projects. Plans and budgets staff and data base resources. When necessary, reallocates resources to maximize benefits. Prepares and delivers presentations on data base management systems (DBMS) concepts. Provides daily supervision and direction to support staff.

#### Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required. With a Master's degree in a related field, a minimum of six years of general experience is required, of which at least four years must be specialized experience. With ten years of general experience, of which at least eight years must be specialized experience, a degree is not required.

#### 22. IMAGING SPECIALIST

#### Minimum/General Experience:

This position requires a minimum of three years experience, of which at least two years must be specialized. Specialized experience includes: hands-on experience in operating imaging, OCR, and document management hardware and software, knowledge of associated computer equipment and the ability to develop or reengineer complex software to satisfy scanning design objectives. Demonstrated ability to work independently or under only general direction.

## Functional Responsibility:

Analyzes business applications and design specifications for imaging activities and applications. Evaluates the quantity and quality of materials to be scanned, and documents special customer requirements. Performs preliminary scanning test(s), if required. Develops work plans showing the cost benefits of imaging within a customer's application and prepares reliable cost estimates. Evaluates and recommends appropriate imaging, OCR, and other document handling hardware and software. Tests, debugs, and refines the software and hardware to produce the required imaging product. Reengineers scanning and OCR software and reconfigures hardware to reduce operating time or improve efficiency. Supervises quality assurance of the scanning process and the scanning product. Provides technical direction to data entry personnel to ensure scanning program deadlines are met and that errors or re-do's are well within tolerances. Provides consultation to the company on the state of the imaging and document management art.

#### Minimum Education:

A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required. With a Master's degree in a related field, a minimum of two years of general experience is required, of which at least one year much be specialized experience. With five years general experience, of which at least three years must be specialized experience, a degree is not required.

#### 23. PROGRAMMER

# Minimum/General Experience:

This position requires a minimum of three years of programming experience and one year of journeyman-level programming experience. Requires comprehensive knowledge of one or more platforms and operating systems, and of programming languages such as C and C++.

# Functional Responsibility:

Under general supervision, develops computer programs in accordance with program and system design specifications. Develops block diagrams and logic flow charts. Translates detailed design into computer program-coded instructions. Tests, debugs, and refines programs to produce desired results. Develops necessary program documentation including operational procedures. Revises programs to make refinements, reduce operating time, and improve efficiency.

## Minimum Education:

A high school diploma/GED and trade school certification in programming is required. With a Bachelor's degree in Computer Science or other related discipline, a minimum of two years of programming experience is required.

#### 24. ELECTRONIC TECHNICIAN

#### Minimum/General Experience:

This position requires a minimum of two years of experience applying theory and related knowledge to test and modify developmental or operational electronic machinery, control equipment and circuitry in surveillance systems, in military, industrial or commercial plants and laboratories.

# Functional Responsibility:

Assembles and tests experimental devices, switch panels and other electronic equipment and components according to engineering data and knowledge of electrical principles. Modifies electronic prototypes to correct functional deviations under direction of electrical engineer. Diagnose cause of electronic or mechanical malfunction of failure of operational equipment and performs preventative and corrective maintenance. Develops wiring diagrams, layout drawings, and engineering specifications for system or equipment modifications or expansion. Plans, directs, and records periodic testing. Confers with engineers and other drafters to interpret design concepts, determine nature and type of required detailed working drawings, and coordinate work with others. Drafts detail and assembly drawings performing duties described under DRAFTER (profess & kin.) Master Title. Complies data, computes quantities, determines materials needed, and prepares cost estimates. Uses standard formulas or manuals to indicate dimension, materials, load capacity and quantities.

#### Minimum Education:

A high school diploma/GED and one to two years of specialized training in electronics is required.

## 25. TECHNICAL WRITER/EDITOR

## Minimum/General Experience:

This position requires a minimum of four years experience in producing and/or editing technical reports, consolidating technical input and analyses, and generating a logical, understandable report. Has the knowledge and ability to interpret engineering and maintenance drawings, and operational procedures, and to absorb and synthesize large quantities of computer-related information. Has experience with desktop publishing and automated work processing. Demonstrated ability to work independently or under only general direction.

## Functional Responsibilities:

Assists in collecting and organizing information required for preparation of user's manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user's manuals, special reports, or any other customer deliverables and documents.

# Minimum Education:

A Bachelor's degree in English, Literature, or other related discipline is required. With a Master's degree in a related field, a minimum of three years of experience is required. With seven years of general experience, of which at least five years is specialized experience in the area of technical writing/editing, a degree is not required.

## 26. DATA ENTRY CLERK

#### Minimum/General Experience:

This position requires a minimum of one year of experience in data entry and verification

## Functional Responsibility:

Performs data entry via on-line data terminal, key-to-tape, key-to-disk, or similar device. Verifies data entered, when applicable.

# Minimum Education:

A high school diploma/GED is required. As Associate's degree in Computer Science or other related field will be considered equivalent to one-half year of general experience. Formal specialized training may be substituted on the basis of one month of training for one month of experience, not to exceed three months.

#### 27. TRAINING SPECIALIST

## Minimum/General Experience:

This position requires a minimum of two (2) years experience in the Navy Training community. The individual must be completely knowledgeable about Navy Training and Training Requirements.

## Functional Responsibility:

Develops Training Management documentation, Training Plans, formal curricula, and other Training related material.

#### Minimum Education:

A Bachelor's degree in education or five (5) years related experience in the Navy Training System.

# 28. WELDER

## Minimum/General Experience:

This position requires a minimum of 5 years experience in electric arc, gas shielded arc, and gas welding. The individual must be capable of executing welds in all positions, with all types of metal and alloys in various shapes.

## Functional Responsibility:

Performs welding tasks at shore and shipboard equipment installations.

# Minimum Education:

A high school diploma/GED is required as well as a Certification of Completion of formal welding training course or equivalent Military "A" school.